



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION

Meeting Minutes for December 12, 2002

Members in Attendance:

Mark P. Smith	Designee, EOE
Mike Gildesgame	Designee, DEM
Marilyn Contreas	Designee, DHCD
Cynthia Giles	Designee, DEP
Gerard Kennedy	Designee, DFA
Mark Tisa	Designee, DFWELE
Joel Zimmerman	Designee, MDC
Joe Pelczarski	Designee, CZM
Richard Butler	Public Member
Gary Clayton	Public Member
David Rich	Public Member
Matthew Rhodes	Public Member
Frank Veale	Public Member
Robert Zimmerman	Public Member

Others in Attendance:

Michele Drury	DEM
Linda Marler	DEM
Vicki Gartland	DEM
Steve Garabedian	USGS
Margaret Kearns	Riverways Program
Sharon Pelosi	DEP
Van Morrill	Public
Ginger Hartman	CDM
Ted McIntire	Town of Reading
David Brew	MWRA
Mike Gootée	West Newbury Water Dept
Paul Howard	Tata and Howard
Karen Pelto	Riverways Program
Eileen Simonson	WSCAC
Glenn Haas	DEP
Duane LeVangie	DEP
Richard Lehan	DEP
Christy Foote-Smith	EOEA

Agenda Item #1: Executive Director's Report

- A conference was held about a week ago on water resources and land use issues. The conference was sponsored by the American Ground Water Trust, a national non profit group which has done a lot of work out west, but is just beginning to be active in the east.
- The MWRA has recently been impacted by budget cuts to its rate relief funding. This represents 10% of MWRA's revenues. Future budgets do not look good.
- Giles recently held a meeting on wetlands changes, using data from wetlands mapping project, to review wetlands changes over past decade. DEP wants to be sure that the wetlands program is targeting the correct areas. A presentation will be made to the WRC at a later meeting.
- The presentation on the updated IBT Guidebook, originally scheduled for this meeting, will be postponed. The materials were in the package. This item will be on the January agenda. Please review this information for the next meeting.

Marler provided an update on the hydrologic conditions:

- It has rained recently. In November, there was almost six inches of rain statewide, and more on Cape Cod. The rain and snow has fallen where it is needed.
- Ground water levels are normal or above normal, for the most part. Those areas with below normal ground water levels are very small. The exception is Cape Cod and the Islands. More research into why these levels have persisted for so long will be conducted.
- The whole state is at the normal level for streamflow for the first time in many months.
- Reservoir levels are still somewhat below normal for this time of year, but conditions are stabilizing and rebounding.
- The Drought Monitor map shows that drought conditions are over in New England, with the exception of very northern Maine. Drought conditions are also receding towards the south.
- Predictions are for normal precipitation during December and an equal chance for above normal, normal, or below normal precipitation for the December, January and February period. El Niño is definitely a factor in our weather this month and we can expect overall above normal temperatures and normal amounts of precipitation.
- The Drought Task Force is meeting next Wednesday. It is expected that the recommendation will be that some regions go back to the normal range.

Agenda Item #2: Vote – Meeting Minutes for July 11, 2002

A motion to approve the minutes of July 11, 2002 was made by Butler and seconded by J. Zimmerman. The vote was 10 to approve, none against, with one abstention.

Agenda Item #3: Presentation – Request for Additional Information on Reading's Interbasin Transfer Application

Drury acknowledged Reading's representatives. The purpose of this presentation is to review the additional information requested under the ITA and to discuss why it is requested. No judgments on the merits of this proposal are being made yet. This is just to update the WRC on the status of this project under the review process. Last month, Smith mentioned some legal and policy issues

surrounding this proposal. Staff is consulting with legal counsel on these matters which will not be discussed during today's presentation.

The application was received on September 20th, as part of the DEIR. Staff reviewed and submitted comments to MEPA. The comment letter was provided last month. This month's memo restates those comments. Staff also looks at all other comments made to MEPA to see if there is anything relevant to the ITA that may have been missed in our review, but all other comments were basically the same as ones we made. The Secretary's certificate was issued on November 1st.

Reading has land area in three river basins: the Ipswich River basin, the Mystic River subbasin of the Boston Harbor basin and the North Coastal basin. Reading has nine existing water supply sources in the Ipswich River basin. MWRA's sources are in the Chicopee and Nashua River basins. Reading is proposing to purchase water from the MWRA to supplement its existing water supply sources. The town will cut back on the use of their water supply sources from spring to early fall and supplement them with MWRA water.

Staff comments are grouped according to the criteria of the Act, to give Reading an idea of how it will be evaluated. We are asking for clarification and documentation of information provided in the DEIR.

Clayton asked how WSCAC's comments are being addressed. Drury replied that staff is working on the legal issues. This presentation is just to request the information needed to conduct a technical review under the criteria of the Act. It is hoped that staff can provide a legal opinion on the issues raised by WSCAC before Reading begins the work to address this request. WSCAC's comments were to MEPA and copied to the WRC. Reading will need to address these comments in the FEIR.

Giles stated that DEP commends Reading for being proactive in addressing the problems of the Ipswich River basin. Whatever the consequences of the review, we appreciate that the town is taking this step.

Simonson said that there are legal matters to be addressed by both the WRC and MWRA. But the most important things to look at are headwater communities in stressed basins and emphasize coordination. WSCAC thinks that the Reading proposal is not timely because Wilmington is now working on master planning and there is a need to get these communities to work together.

Agenda Item #4: Vote – Mansfield's Local Water Resources Management Plan

Smith reminded the Commission that there was a presentation on this item last month. Drury said that one of the criteria of the Interbasin Transfer Act's regulations is that a community has or is in the process of developing a local water resources management plan. Mansfield was in the process of developing their plan when they went through the ITA process for the Morrison Well. The draft was submitted in fulfillment of a condition of their approval for that well. Staff is recommending that this plan be approved by the WRC. These plans are meant to be a digest of all the other existing plans. The town has incorporated all of our comments and suggestions.

These plans are required for some DEP programs, as well as for admission to the MWRA (which is not the case with this community).

V O T E	A motion was made by Clayton and seconded by Giles to approve the Mansfield Local Water Resources Management Plan, as per staff memo of 12/12/02. The vote in favor was unanimous.
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Agenda Item #5: Vote - Charlton's Request for Determination of Insignificance

Smith stated that Charlton has been asking for an indefinite postponement of this decision, but the WRC decided last month that this was not in anyone's best interests. The WRC suggested that the application be withdrawn, but Charlton opted not to do that. The town was told that if the application was not withdrawn, the WRC would vote today. There was a presentation in June, but it will be recapped today. The town has chosen not to attend today's meeting.

Drury said that in June, Staff recommended that this project did not meet the criteria for insignificance and thus would need a full Interbasin Transfer review. Finding that a project does not meet these criteria is not necessarily a denial, however, there were some existing impacts judged by Staff to be of concern. Staff review was based on the direction given by the WRC during the Oxford sewerage project review. During that review, the Riverways program had raised some issues with streamflow, rare and endangered species, and wetlands in Wellington Brook. It was felt that it would be more appropriate to review these impacts under this project, because it involves a direct water withdrawal and the sewer proposal did not extend into the Wellington Brook area.

Charlton has no public water supply. It has land area in both the French and Quinebaug River basins. Oxford's sources are in the French River basin and the amount of water to be sold to Charlton that would be returned to the French River basin via sewer or on-site septic was discounted. Charlton's private wells have had severe contamination from the Mass Pike site and the Mass Highways garage.

After this review, although the water supply situation was critical in Charlton, we had to recommend that this did not meet the criteria for insignificance. Staff has worked with DEP and the town to craft an Administrative Consent Order (ACO). Staff was cautious about this as there was a concern about the appearance of circumventing the ITA. The Act exempts transfers conducted under a DEP emergency declaration. An ACO contains an emergency declaration.

Gartland discussed the hydrological analyses. For insignificance, Staff looked at flows on the French River, and for the most part, impacts were not great; however, daily flows during the 80's drought showed the project did not meet the 5% criterion. The major issue is that the tributaries where these sources are located are both showing potential impacts in terms of loss of water. Wellington Brook: The 99% flow duration showed a potential reduction in flow of 93%; for the 95% duration curve analysis it was 35%. This does not include the current impacts. This represents only that flow, subject to the Act, that is leaving the basin. On the unnamed tributary: there was a potential 43% reduction in flow to the 99% flow duration curve and a potential 19%

reduction in flow to the 95% flow duration curve. Impacts were well over 100%, if the water currently being pumped was included in the analyses. The bottom line is that there is already a lot of water leaving these tributaries. To take more water would have a major impact to the basin as a whole.

Smith said that the difficult part of this is that there is significant contamination in town. Charlton is already building a pipeline to Oxford. WRC concern is that they need to look more holistically at their situation. It is not clear that if they do come in for a full ITA review, whether it will be approved, given the impacts seen thus far.

Drury said that she heard that the Water Board is not ready to sign the ACO. This is unfortunate because it does not help them get any water in the short term. Haas said that the reason for this is that the Water Board was just recently created. It has no source of revenue. Their legal counsel's ruling was that they couldn't bind the community, financially, to do the work required by the ACO. They will have to wait until town meeting to get approval to appropriate the money required. They fully understand that there would be problems in getting approval under the ITA.

Clayton asked if the question was about the Water Board's authority to bind the community financially or if they have substantive disagreements with DEP. Haas replied that it is purely the financial concerns. Drury added that there has been much back and forth between the town and DEP. Smith said that they have a politically difficult situation, because they've spent significant resources building a pipeline that they can't use.

Marler asked what alternative sources was the Water Board able to identify? Smith replied that the Town has some old studies that they are going to revisit to see if these potential sources are still viable and if they can meet the town's needs. But it is potentially three to five years to develop a new supply.

Drury said that in the Staff Recommendation, Charlton is directed to meet with DEP and Staff to get the long-term water supply planning and development underway. In addition, it is recommended that when Aquarion's Water Management Act permit reviewed, that streamflow triggers be given consideration, because of the existing impacts to these tributaries. Smith suggested that these recommendations be removed from the decision, because he didn't think we had the authority to require this. The record can show that this was recommended, but it should not be in the final decision.

V O T E	A motion was made by Clayton and seconded by Veale that the WRC finds Charlton's Request for Determination of Insignificance does not meet the criteria for insignificance. The vote in favor was unanimous.
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Agenda Item #6: Vote – Revised application forms for requests for determination of applicability and for requests for determination of insignificance under the Interbasin Transfer Act

Drury stated that at the last meeting Clayton and Tisa made comments which have been incorporated into this version of the applications. The request for a determination of applicability form is not used very often, only when necessary. This has not been changed too much from the original. In the request for determination of insignificance form, all of the questions in the original version appear in the revised version, reordered to make them flow better. A question on stressed basins has been added, as well as the environmental criteria as they appear in the regulations, so that every proponent knows exactly what they are being evaluated against. Drury's experience has shown that, in the past, there have been some proponents who have thought that if a transfer was for an amount under 1 mgd, it should automatically be considered insignificant. This is not the case, according to the regulations.

Questions that are specific to wastewater transfers have been added to the revised form. The original application seemed more geared towards water supply, so staff needed to do a lot of interpretation to have the application questions address wastewater issues. Staff asks for this type of information anyway. The requests have been put in the application form to cut down on the back and forth between staff and the proponent.

Clayton suggested that a line be added requesting the email address of the proponent. The application forms will be amended to request this.

V O T E	A motion was made by Zimmerman and seconded by Contreas to approve the revised application forms for the Request for Determination of Applicability and Insignificance under the Interbasin Transfer Act, as amended.
	The vote in favor was unanimous.

Agenda Item #7: Vote – Revised Title 5 Regulations

Pelosi gave a presentation regarding the proposed Title 5 regulatory revisions. DEP is proposing a one year delay in the effective date (to January 1, 2004) to modify the percolation rate from 30 minutes to 60 minutes in certain conditions. This would give communities time to assess impacts of the change and to plan for the future. Public hearings were held and many form letters were received regarding the impacts of growth and sprawl development. Not much comment was provided on the issue of the effective date.

Veale asked what the scientific basis is for changing the percolation rate. Pelosi answered that it has been DEP's position since 1995 and that the science supports this. In the 1995 version of the regulations, communities were given three years to update their bylaws to prevent sprawl. In 1998, the plan was to increase the percolation rate to 60 minute per inch. This hasn't happened yet.

R. Zimmerman said that the notion that the science supports the 60 minute per inch percolation rate depends on how the question is phrased. If it is a narrow question, the science will support this. But if the question is asked more broadly and put it into the context of the community, the

answer might be different. That's why the Environmental League of Massachusetts and a number of other groups have asked for a full EIR on the impacts of this change under the failsafe provisions of MEPA. There is another science involved here that has to do with the long-term environmental sustainability of these communities, habitat, streamflow and the like, and this has not been looked at. Zimmerman said that he would expect that this science would not support 60 minute per inch percolation rate.

Gartland asked Zimmerman to explain what he was taking about, particularly if he was suggesting that this change will allow more transfers from the subbasin where the water supply sources are located. He said yes, that if more water is shifted to areas with increased percolation rates, the impacts to surface water will be increased. Smith said that this particular regulation change was not the place to deal with these broader questions. This is a narrow change that has been anticipated since 1995. Zimmerman said that this regulation change would add 10 to 25% to the amount of buildable land in some areas.

Veale asked Zimmerman why not leave it to the local town by-laws. Zimmerman replied that the state has the responsibility to determine by the broader science if this change does protect environmental resources. Plus there is a strong push by the real estate industry to have a uniform Title 5 code.

Contreas said that there is still a housing supply problem in Massachusetts. Zimmerman said that there won't be a single affordable house built because of this regulation change. Smith said this was an issue to discuss in the context of our 2003 work plan. Zimmerman said that the towns already have the ability to develop the land. This Commission has the ability to recommend, but it does not have the regulatory authority to prevent, the "mansionization" of the I-495 area. Smith stated that Zimmerman raised legitimate issues, but the WRC must look at these proposed changes under the narrower question of public health and safety.

Kennedy said that from an agricultural standpoint, DFA has concerns about the change. DFA recognizes that Title 5 is not designed to be a zoning tool, but is concerned that this change will open more farmland up to development. Giles said that she agreed that Title 5 is not a zoning and development tool, but DEP has a public health and environmental mission. From a public health perspective, the science supports this change. DEP has supported having a delayed enactment period so that towns can address these town-specific questions. DEP made these same comments in the Barriers to Housing report. DEP's primary mission is served by these revisions. Working through a public health regulation is not the way to address the larger issues. J Zimmerman asked if there would be any model by-laws that a town could use in order to require a 30 minutes per inch rate, if it wanted. Pelosi said that there some examples in existence.

Veale suggested that what R. Zimmerman is really saying is that he wants the MEPA process to determine if the science is right. R. Zimmerman said yes, it could be done as an if/then process. Contreas asked if we were ready to wait a decade for this. Pelosi said that DEP did consider the things that R. Zimmerman is suggesting, but the MEPA standard that DEP had to abide by was whether a regulatory change would lessen the stringency of the protection. It was decided, with the concurrence of MEPA, that a full EIR was not necessary, because the current regulations already contemplate this change and the 60 minutes per inch is already allowed in regulations

and the science supports that adequate treatment occurs at this rate. Simonson said that in some places, the 30 minutes per inch standards has resulted in water supplies being contaminated, with the end result being more wide spread sewerage. This kind of regulatory change without state oversight will result in uneven application of the Title 5 regulations across the state. There is a need to find a way to intervene with Board of Health decisions. Simonson is concerned that proper implementation would require a lot of support and intervention by DEP and that appears unlikely to happen.

V O T E	A motion was made by Rich and seconded by Giles to approve the proposed changes to Title 5 as presented.
	The motion passed with 10 in favor, 2 against, with one abstention.

Agenda Item #8: Presentation – Proposed Changes to Surface Water Permitting Rules

Lehan stated that the primary purpose of these regulation changes was to authorize DEP and EPA to jointly issue Phase II storm water permits for small municipal separate storm sewer systems (MS4s). This incorporates the federal regulations and makes more explicit DEP's authority to issue general permits.

Phase II addresses storm water discharge from small MS4s located within urbanized areas (residential population of at least 50,000, overall population density of at least 1,000 people/square mile). In Massachusetts, there are 251 cities and towns in this category. The core requirement is that MS4s need to develop, implement and enforce a storm water management plan. These plans should be designed to eliminate pollution from these systems to the maximum extent possible. A storm water management plan must consist of six minimum controls: public education and outreach; public participation and involvement; realistic discharge detection and elimination; construction site (1 or more acres) runoff control; post-construction site runoff control; pollution prevention and good housekeeping. This regulation revision is consistent with EPA and it allows DEP to determine if there is an existing stakeholder or local qualifying program that an MS4 can use in lieu of complying with these specific requirements. In the draft Phase II MS4 permit, EPA and DEP agreed that there are certain standards in DEP's storm water management policy that can substitute for some of the minimum control measure components. The regulated MS4s will be required to file a notice of intent (NOI) with DEP and EPA for coverage under the general permit by March 10th. The NOI will require the MS4 to include a storm water management plan which addressed measurable goals.

The other regulatory revisions address existing and prospective permitting practices. The first is to make more explicit the range of special permit conditions that DEP has the authority to implement in its surface water discharge permits under the Massachusetts Clean Waters Act. Existing regulations give DEP broad authority, but it is important that the regulated community understand this. This is a general authority.

The proposal is to add additional language that empowers DEP to specifically require a proponent to apply for these permits. Under Phase II, EPA will be issuing its own permit. DEP is trying to parallel EPA's timeframe.

Veale asked how DEP planned to implement the regulations. DEP has decided that this is a priority due to the environmental quality issues. EPA will be implementing Phase II permits, and DEP wants to make sure that the program reflects the needs of Massachusetts. Smith asked if there was anything in these revised regulations that speaks to recharge of storm water. Lehan replied that this is not the emphasis, however, the regulations do give DEP broad authority to impose those types of conditions.

Agenda Item #10: Presentation – Revised Water Needs Forecasts for West Newbury (taken out of turn)

Drury acknowledged West Newbury's representatives. She reminded the WRC of the recently adopted policy, which outlined the conditions under which Staff would revise water needs forecasts, especially for communities which had existing Water Management Act permits. West Newbury is in compliance with its WMA permit, however since the 1990 census, the town has had a 21% increase in population. The town is only about 65% served by public water supply. Most of the population increase has taken place in the area of town served by public water supply. It is anticipated that the service population will increase by 3,600 people, or 76% of the town, by 2020. Still, the early population projections were off. The original MISER projections predicted that in 2015, the town's population would increase by 4,300 people. It has well exceeded that, according to the 2000 census. So the population information used to develop the original projections was off. Therefore the WRC-approved water needs forecasts were off.

West Newbury's unaccounted-for water is 12%; residential gpcd is 65 (both of these statistics were averaged over the last 5 years). They meet all the conservation conditions. When the water needs forecasts were developed in 1994, it was projected that the town would use 0.19 mgd in 2005. The new projection predicts that they will use 0.23 mgd in 2005. This doesn't put them out of compliance with their WMA permit, but as the permit period progresses, they get close to needing an amended WMA permit.

Levangie said that the permitted volume is 160,000 gpd, based on the capacity of the sources. This is why demand has not exceeded the permitted volume. Drury said that West Newbury currently buys water from Newburyport and they are trying to lessen their dependence on Newburyport. West Newbury's sources are in the Merrimack River basin. The town wants to use these sources to a greater degree.

Howard said that Newburyport had the highest water rates in the state. By lessening its dependence on Newburyport, West Newbury will have more control over its water rates and, hence, be better able to address its system's needs. Gootée said that West Newbury was developing a bedrock well, with a capacity of 144,000 gpd.

Simonson asked if the town intended to read its meters four times per year or to go to telemetry and if the community conducted water audits. Drury said they do not do a formal water audit, but the process of filling out DEP's annual statistical reports serves to make them audit where

their water is going. Simonson said that they had no drought plan. Drury said that this issue would be better addressed under the amended WMA permit.

A vote will be requested in January.

Agenda Item #9: Discussion and Possible Vote – Office of Ecosystem Restoration

Foote-Smith stated that funding had originally been requested under the Section 22 program, but since that time other ways of advancing support for this Office and the Ipswich River Ecosystem Restoration and pilot planning project have been found. This will be discussed further in January. The request for Section 22 program funding was withdrawn.

Pelto said that an interagency committee on aquatic habitat restoration was to be convened to look at regulatory issues relative to ecosystem restoration. In September, the WRC asked to see a list of invited participants. This list is being distributed. It has been reviewed and approved by Secretary Durand.

Gartland asked if funding would be shifted from the Charles River basin and SuAsCo basin wetlands restoration projects. Foote-Smith said that it would be. Gartland said that Mike Fleming, SuAsCo basin team leader, is concerned about this. There is money available from Nyanza for wetland restoration, but in order to use it, a wetland restoration plan is needed. This is what the state money was going to be used for. Foote-Smith said that she had spoken with Fleming and wetland restoration is evolving. It does not make sense to do more planning without knowledge of whole ecosystem planning. Foote-Smith said she's learned from Fleming that in the SuAsCo basin, much of what will be focused on is fish passage. For this very reason, whole ecosystem restoration should be looked at. This will be discussed further at the January meeting. Gartland said that after reviewing the Ipswich pilot proposal, she wanted to emphasize that about \$750,000 had been spent on the Ipswich basin, doing studies and watershed management plans. Now is the time to start implementing the recommendations of these studies. Foote-Smith said that her program had a good track record of turning plans into projects on the ground and that is certainly the intent here.

Agenda Item # 11: Discussion – 2003 WRC Work Plan

Smith said that he hoped to get approval of the work plan in January. Projects to be included:

- The water assets project: a consultant should be hired in a week or two. This is a major piece of the state-wide water resources management program. We hope it will get communities to protect their water supplies. 135 communities will be looked at under this project. The rest of the state will be looked at in FY04. This work will provide a community by community look at water resources. When it is done, the questions posed by R. Zimmerman earlier can be addressed.
- State streamflow policy: this would provide guidelines for protecting natural streamflows in our rivers. The first piece will be to develop a technical approach. Next, we will look at how to implement the policy.
- IBT Guidance will be completed. Perhaps after the guidance is out, the regulations can be revised.

- Ipswich River basin plan update: This will use the latest information that has been developed by USGS and Fisheries.
- Updates on ecosystem restoration program
- More work on stressed basins, to include habitat and water quality
- Regulatory reviews and priorities for ACOE projects.

This is an overly ambitious work plan, given the diminishing staff, but these projects could be carried through to the following year. We are also working with a group called SEACHANGE that is trying to put on a conference and develop a report on recharge issues.

Rich asked about the water assets project: how did the 135 communities get chosen? Smith said they were chosen based on the I-495 belt, which is the fastest growing region in the state and expanded on a watershed basis, so that a limited watershed analysis could be conducted.

Simonson said that some of the assets can't be assessed until it is known where DEP will be going with its regulatory process.

Meeting adjourned

Minutes approved 9/9/04